

U.S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-346/78-07

Docket No. 50-346

License No. NPF-3

Licensee: Toledo Edison Company  
Edison Plaza  
300 Madison Avenue  
Toledo, Ohio 43652

Facility Name: David-Besse Nuclear Power Station, Unit 1

Inspection At: David-Besse Site, Oak Harbor, Ohio

Inspection Conducted: March 8-10 and 21-23, 1978

Inspector: T. N. Tambling

*RC Knop for*

4/14/78

Approved By: R. C. Knop, Chief  
Reactor Projects Section 2

*RC Knop*

4/14/78

Inspection Summary

Inspection on March 8-10 and 21-23, 1978 (Report No. 50-346/78-07)

Areas Inspected: Routine, unannounced inspection of maintenance activities, followup on circulars, Part 21 report, and other open items. The inspection involved 49 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

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## DETAILS

### 1. Persons Contacted

- \*T. Murray, Station Superintendent
- \*E. Novak, Superintendent, Power Engineering
- \*C. Domeck, Nuclear Project Manager
- \*B. Beyer, Maintenance Engineer
- \*W. Green, Assistant to Station Superintendent
- \*J. Buck, Operations Quality Assurance Manager
- \*C. Daft, Operations Quality Control Supervisor

The inspector also talked with and interviewed other licensee employees, including members of the technical and engineering staff and QC staff.

\*Denotes those attending the exit interview.

### 2. Licensee Action on Previous Inspection Findings

(Closed) Unresolved (346/77-34): The licensee completed his investigation on receipt of the analysis of the black oily material found dripping from penetrations 119 (A spare penetration) in the cable spreading room. The analysis performed by Dow Chemical Company concluded that the material was uncured Part A (of a two part sealout material). The licensee identified and inspected all pours made with that batch of sealant. No other defects were found. It was concluded that this was an isolated case.

(Open) Unresolved (346/78-08): A representative of the licensee stated that the station's pressure/temperature monitoring capability had been satisfactory addressed with NRR during the precicensing review of over pressurization protection. It had been concluded that no further action was required. Reference was made to letter from L. E. Roe to J. F. Stolz, dated April 7, 1977, Serial No. 260.

### 3. Licensee Action on IE Bulletins and Circulars

The inspector examined licensee records and interviewed licensee representatives to verify that corrective action and/or review had been taken with respect to IE Bulletin 78-01 and Circulars.

Bulletin 78-01: The inspector found that the licensee had surveyed equipment lists, identified GE CR 120A relays in use and inspected the identified relays.

Circular 77-14: The inspector found that the licensee had reviewed procedures and drawings to identify interconnections between contaminated and noncontaminated water systems to assure adequate separation.

Circular 77-16: The inspector found that the licensee had reviewed procedures, tests, and protection circuitry on the diesel generator to insure that the circumstance described in the circular did not exist.

4. Review of Nonroutine Events Reports by the Licensee

The inspector reviewed licensee actions with respect to the following listed nonroutine event reports to verify that the events were reviewed and evaluated by the licensee as required Technical Specification; that corrective action was taken by the licensee; and that safety limits, limiting safety system settings, and limiting conditions for operations were not exceeded. The inspector examined selected Station Review Board minutes, the licensee's investigation reports, logs, records, inspection and interviewed selected personnel.

Containment Emergency Air Lock Leak Test not performed as required (NP-33-77-15)

The following licensee event reports were reviewed and closed out on the bases of an inoffice review and evaluation:

Failure of AFP 1-1 to start (NP-33-77-46)

Control Rod 3 of Group 5 position indicator inoperable (NP-33-77-58)

AFP 1-2 inoperable for planned adjustment (NP-33-77-61)

Reactor Coolant Pump Trip (NP 33-77-76)

RPS daily heat balance check not performed (NP-33-77-93)

Failure to perform required surveillance testing on DG 1-2 (NP-33-77-101)

RPS Channel 3 Loop B flow indication failed low (NP-33-77-105)

Control of both AFP turbines loss (NP-33-77-110)

Reactor startup performed without performing intermediate range function I tests (NP-33-77-112)

Reactor coolant pump monitor found out of tolerance (78-020)

RPS hot leg temperature string inoperable (78-020)

PRS flow transmitter inoperable (78-022)

Reactor trip due to spike in RPS high temperature monitor (78-023)

5. QA For the Startup Test Program

The inspector reviewed the results of the QA Audit No. 516 performed February 8-15, 1978. Of the Startup Test Program. The audit included the review of 17 tests for conformance to administrative and QA requirements. The audit was found to have been performed in accordance with QA procedures.

6. CRD Cabinet Mounting Defects, Part 21 Report

A representative of the licensee informed Region III by telephone on February 21, 1978, with a followup report on February 24, 1978, concerning a potential defect in the mounting welds on certain control rod drive cabinets.

The inspector reviewed the design specifications and drawings, QC documentation and correspondence associated with the control Rod Drive Cabinets. Within this review it was noted that the defects were discovered as a result a special inspection initiated as the result of an audit of records prior to final record turnover. The affected cabinets apparently did not receive contractor inspection/acceptance as called for in Fischbach and Moore inspection procedure IIP 7749-E14-7g.001. Nonconformance Report 1254 dated December 27, 1977, was written to cover the missing documentation associated with cabinets C3630, C3801, C4603, C4606, C4612, C4806, C5764A, C6706, and C6707. To provide the documentation, Bechtel and TECO QC performed an inspection per Fischbach and Moore inspection/acceptance procedure. Acceptable anchoring of seven cabinets could not be determined at this time due to inaccessibility of the anchoring.

1. Ltr to James G. Keppler, from L. E. [redacted], Serial No. 417, dtd 2/24/78.

A followup inspection was performed by TECO Engineering and Bechtel.

This second inspection concluded that seven cabinets had not been anchored in accordance with Bechtel's drawings and B&W, change 68-01, Revision 1 (dated October 7, 1975). These cabinets were:

- C3630 - Auxiliary Shutdown
- C3801 - H2 Anchorager
- C4603 - CRD Breaker 1
- C4606 - CRD Breaker 2
- C4606 - CRD Breaker 4
- C4806 - CRD Breaker 3
- C5764A - Seismic Recording Cabinet.

This finding was documented in Nonconformance Report No. 1258 dated February 13, 1978. The design called for anchoring welds every 2 inches in 4 inches. It had apparently been interpreted as one inch in 4 inches along portions of the panels in the translation from B&W drawings to the welding requirement.

NCR No. 1258 was transmitted to B&W for resolution. B&W informed TECO by letter dated February 17, 1978, that the cabinet anchoring did not meet the test conditions in the generic seismic testing (qualification testing performed to meet installation requirements for a broad scope of applications). B and W letter also advised the TECO to make a Part 21 report on the anchoring defect.

The inspector verified that the corrective action stated in the licensee's report has been scheduled for the April outage.

7. Plant Maintenance

The inspector examined licensee's procedures and records to verify that maintenance activities at the station are being performed within limiting conditions of operation and administrative controls and approval, using approved procedures, and that post-maintenance testing was performed prior to returning the equipment or system to operations.

In the review of procedures used to conduct that actual maintenance work, the inspector found several inconsistencies in the classification of procedures and the details for returning equipment service after the maintenance work. In the exit interview the inspector discussed the following potential problem areas.



a. Classification of Procedures

The licensee classifies maintenance into routine and non routine work and procedures into Maintenance Procedures (MP) and Maintenance Instructions (MI). MP's are reviewed by the Safety Review Board (SRB) and approved by the Station Superintendent. MI's are reviewed and approved by only the Maintenance or Instrument and Control (I&C) Engineer. Administrative Procedure 1844.00, Maintenance, permits the use of MI's for routine maintenance (Skill-of-the-craft) on safety-related equipment.

Based upon the inspectors review of selected MI's, there appear to be an inconsistency in the classification of MI's. Exemplified of MI's that should be MP's are:

M-13, Internal Valve Inspection and Repair - Welded Bonnet Check Valves.

M-14, Repairing Valves.

M-21, Draining and Filling Diesel Generator Jacket Water Cooling Systems.

M-25, Remove and Replacement Diesel Generator Air Starting Motor.

M-29, Removing Generator Bearings for Inspection or Replacement.

M-31, Removal, Inspection, and Reinstalling HPI Motor Bearing.

M-33, Removing, Replacing, and Setting Torque Switches for SMB-00/SMB-000 Limitorque Operators.

b. Post Maintenance Testing for Operability

Both Regulatory Guides 1.33 and Section XI of the ASME Code address post maintenance testing. Post Maintenance testing is part of the manual preplanning requirement for maintenance activities.

Based upon the inspectors review of maintenance activities and MP's and MI's there appears to be an inconsistency as to the

degree testing as addressed. Some procedures cover it by saying as specified by the Maintenance or I&C Engineer. Another example is MP 1410.06, Packing Valves, the statement for testing is to return the valve to service and assure free operation without leakage. This statement may be adequate for some equipment, but may not satisfy operability testing and documentation for other types equipment.

c. Use of Maintenance Procedure

A licensee's internal audit of MWO 77-1103 which involved the repacking of a manual valve indicated that MP 1410.06, Packing Valves, was not completely adhered to in performance of the job. The results of this QC inspection was transmitted to the Station Superintendent on January 25, 1978. A representative of the licensee stated that he was following this problem up with maintenance department personnel to prevent recurrence.

d. Cross-Reference of Technical Specification Requirements in Maintenance Instruction

In the inspector review of MI's it was noted that these procedures were normally as well written as MP's. However, in AD 1344.00, Maintenance, the format for MI's does not address Technical Specifications cross references as do MP's. Some MI's do not address Technical Specifications operability requirements. One example is MI E 17, Checking Current Limits and Adjusting Float Voltage on Station Battery Chargers.

8. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection. The inspector summarized the scope and findings of the inspection. The licensee representatives made the following remarks in response to certain of the items discussed by the inspector.

Stated that they would review their maintenance activities with regard to the comments made by the inspector. (Paragraph 7)

Stated that they were meeting the intent of Bulletin 75-08 and that the subject had been adequately addressed during the pre-licensing review of over-pressurization protection with NRR (Paragraph 2).